United States Department of Agriculture | Forest Service | Northeastern Area State & Private Forestry | 180 Canfield Street Morgantown, WV 26505-3101

File Code: 3410 (NA-10-02)
Date: March 18, 2011

Subject: 2010 Aerial Detection Survey

To: Leanne M. Marten, Forest Supervisor
Allegheny National Forest

In 2010, our survey and analysis of forest insect and disease related damage on the Allegheny National Forest (ANF) is based on Pennsylvania Department of Conservation and Natural Resources (DCNR) aerial survey data. The DCNR flew 68 % of the ANF and mapped a total of 13,955 acres of visible damage within the proclamation boundary. The most common damage causing agent in 2010 was frost.

Frost was mapped on both Ranger Districts, 5,306 acres on the Bradford District and 7,494 acres on the Marienville District. This frost damage was the result of above average temperatures in early April and a week of heavy frost in late April. This combination led to early bud break for many species and the frost/freeze caused damage to the emerging foliage.

Forest tent caterpillar (FTC), *Malacosoma disstria* Hubner (Lepidoptera: Lasiocampidae), was active this year with 1, 079 acres of defoliation being observed on the Marienville Ranger District. FTC is a native insect that primarily attacks sugar maple, oak, poplar and other deciduous hardwoods. FTC populations have caused extensive defoliation throughout Pennsylvania since 2006. Regionwide outbreaks of this insect have been documented since colonial times and last anywhere from 6 to 16 years in the northeast. Low winter temperatures, and predation by the pupal parasitoid, *Sarcophaga aldrichi* Parker (Diptera: Sarcophagidae), and a larval pathogen *Furia gastopachae* (Raciborski) Filotas, Hajek and Humber (Entomophthoromycotina: Entomophthorales) usually combine to reduce populations. However, FTC population declines are not expected in 2011, especially in these newly infested areas, it will likely take several seasons before adequate numbers of natural enemies can buildup and begin to control FTC populations.

District Rangers and other field-going personnel are reminded that they have the primary responsibility for on-the-ground, initial detection of insect and/or disease outbreaks. We ask that all field personnel continue to monitor for evidence of insect activity defoliation, discoloration, and mortality in their areas and report any insect and disease activity to the Morgantown Field Office. Activity such as an unusually high numbers of caterpillars present in the forest in early spring and summer may be a prelude to an expanded defoliation event.

If you or any of your staff have any questions or comments regarding this survey, please contact Rick Turcotte or Ann Steketee at (304) 285-1503.

Sincerely,

Robert Lueckel

Field Representative

Morgantown Field Office

Cc: District Ranger, Bradford RD w/enclosures
District Ranger, Marienville RD w/enclosures
Andrea Hille, Forest Silviculturist

RMT/AKS